

**TRANSMITTAL  
FORM**

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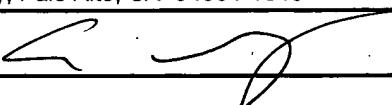
Total Number of Pages in This Submission

13

Application Number	10/709,498
Filing Date	May 10, 2004
First Named Inventor	Heng-Chia CHANG
Art Unit	3662
Examiner Name	Not yet assigned.
Total Number of Pages in This Submission	13
Attorney Docket Number	62348.00003

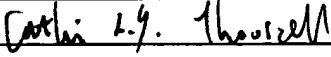
ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form w/ duplicate [Total 2 pages]	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____  <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Postcard
<b>Remarks</b>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm	Squire, Sanders & Dempsey L.L.P. 600 Hansen Way, Palo Alto, CA 94304-1043		
Signature			
Printed Name	Aaron Wininger		
Date	December 28, 2004	Reg. No.	45,299

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Cathi L.G. Thoressell	Date	December 28, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEE TRANSMITTAL for FY 2005

**JAN 03 2004**  
Effective January 2004. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$ ) 0

<i>Complete if Known</i>	
Application Number	10/709,498
Filing Date	December 28, 2004
First Named Inventor	Heng-Chia CHANG
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METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)																																																																																																																																																																																																																																			
<input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money <input type="checkbox"/> Other <input type="checkbox"/> None <input checked="" type="checkbox"/> Deposit Account: Deposit Account Number      05-0150  Deposit Account Name      Squire, Sanders & Dempsey L.L.P.				<b>3. ADDITIONAL FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Large Entity</th> <th style="text-align: left; width: 15%;">Small Entity</th> <th colspan="4" style="text-align: left;">Fee Description</th> <th style="text-align: right; width: 15%;">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th colspan="2"></th> <th></th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td colspan="2">Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td colspan="2">Surcharge - late provisional filing fee or cover sheet</td> <td></td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td colspan="2">Non-English specification</td> <td></td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td colspan="2">For filing a request for <i>ex parte</i> reexamination</td> <td></td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td colspan="2">Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805</td> <td>1,840*</td> <td>1805</td> <td>1,840*</td> <td colspan="2">Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td colspan="2">Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252</td> <td>430</td> <td>2252</td> <td>215</td> <td colspan="2">Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253</td> <td>980</td> <td>2253</td> <td>490</td> <td colspan="2">Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254</td> <td>1,530</td> <td>2254</td> <td>765</td> <td colspan="2">Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255</td> <td>2,080</td> <td>2255</td> <td>1,040</td> <td colspan="2">Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401</td> <td>340</td> <td>2401</td> <td>170</td> <td colspan="2">Notice of Appeal</td> <td></td> </tr> <tr> <td>1402</td> <td>340</td> <td>2402</td> <td>170</td> <td colspan="2">Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>1403</td> <td>300</td> <td>2403</td> <td>150</td> <td colspan="2">Request for oral hearing</td> <td></td> </tr> <tr> <td>1451</td> <td>1,510</td> <td>1451</td> <td>1,510</td> <td colspan="2">Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td colspan="2">Petition to revive – unavoidable</td> <td></td> </tr> <tr> <td>1453</td> <td>1,370</td> <td>2453</td> <td>685</td> <td colspan="2">Petition to revive – unintentional</td> <td></td> </tr> <tr> <td>1501</td> <td>1,370</td> <td>2501</td> <td>685</td> <td colspan="2">Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>1502</td> <td>490</td> <td>2502</td> <td>245</td> <td colspan="2">Design issue fee</td> <td></td> </tr> <tr> <td>1503</td> <td>660</td> <td>2503</td> <td>330</td> <td colspan="2">Plant issue fee</td> <td></td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td colspan="2">Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807</td> <td>50</td> <td>1807</td> <td>50</td> <td colspan="2">Processing fee under 37 CFR 1.17 (q)</td> <td></td> </tr> <tr> <td>1806</td> <td>180</td> <td>1806</td> <td>180</td> <td colspan="2">Submission of Information Disclosure Stmt</td> <td></td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td colspan="2">Recording each patent assignment per property (times number of properties)</td> <td></td> </tr> <tr> <td>1809</td> <td>790</td> <td>2809</td> <td>395</td> <td colspan="2">Filing a submission after final rejection (37 CFR § 1.129(a))</td> <td></td> </tr> <tr> <td>1810</td> <td>790</td> <td>2810</td> <td>395</td> <td colspan="2">For each additional invention to be examined (37 CFR § 1.129(b))</td> <td></td> </tr> <tr> <td>1801</td> <td>790</td> <td>2801</td> <td>395</td> <td colspan="2">Request for Continued Examination (RCE)</td> <td></td> </tr> <tr> <td>1802</td> <td>900</td> <td>1802</td> <td>900</td> <td colspan="2">Request for expedited examination of a design application</td> <td></td> </tr> <tr> <td colspan="6" style="text-align: left;">Other fee (specify) _____</td> <td></td> </tr> <tr> <td colspan="6" style="text-align: left;">*Reduced by Basic Filing Fee Paid</td> <td style="text-align: right;">SUBTOTAL (3)      (\$ ) 0</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description				Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)				1051	130	2051	65	Surcharge - late filing fee or oath			1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet			1053	130	1053	130	Non-English specification			1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination			1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action			1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action			1251	110	2251	55	Extension for reply within first month			1252	430	2252	215	Extension for reply within second month			1253	980	2253	490	Extension for reply within third month			1254	1,530	2254	765	Extension for reply within fourth month			1255	2,080	2255	1,040	Extension for reply within fifth month			1401	340	2401	170	Notice of Appeal			1402	340	2402	170	Filing a brief in support of an appeal			1403	300	2403	150	Request for oral hearing			1451	1,510	1451	1,510	Petition to institute a public use proceeding			1452	110	2452	55	Petition to revive – unavoidable			1453	1,370	2453	685	Petition to revive – unintentional			1501	1,370	2501	685	Utility issue fee (or reissue)			1502	490	2502	245	Design issue fee			1503	660	2503	330	Plant issue fee			1460	130	1460	130	Petitions to the Commissioner			1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)			1806	180	1806	180	Submission of Information Disclosure Stmt			8021	40	8021	40	Recording each patent assignment per property (times number of properties)			1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))			1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))			1801	790	2801	395	Request for Continued Examination (RCE)			1802	900	1802	900	Request for expedited examination of a design application			Other fee (specify) _____							*Reduced by Basic Filing Fee Paid						SUBTOTAL (3)      (\$ ) 0
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**or number previously paid, if greater; For Reissues, see above				SUBTOTAL (3)      (\$ ) 0																																																																																																																																																																																																																																			

SUBMITTED BY						Complete (if applicable)	
Name (Print/Type)	Aaron Wininger	Registration No. (Attorney/Agent)	45,229	Telephone	(650) 856-6500		
Signature				Date	December 28, 2004		

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Heng-Chia CHANG      Examiner: Not yet assigned.

Serial No.: 10/709,498      Art Unit: 3662

Filed: May 10, 2004

Title: UWB PULSE GENERATOR AND UWB PULSE  
GENERATION METHOD

Mail Stop AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT PURSUANT TO  
37 C.F.R. §§1.97(b)**

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56 and pursuant to 37 CFR §§1.97-1.98, Applicant hereby notifies the U.S. Patent and Trademark Office of the references listed on the enclosed Form PTO-1449. One copy of each non-patent literature document cited reference is submitted herewith. Pursuant to the PTO's waiver of the requirements under 37 CFR 1.98(a)(2)(i) for submitting a copy of each cited U.S. patent/patent application for new applications filed after June 30, 2003, we are not submitting copies of the U.S. patents cited.

The present Information Disclosure Statement is being filed more than three months after the filing date but before receiving the first Office Action. Accordingly, no fee or certification is needed.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant reserves the right to dispute any of the listed documents as prior art during examination. Furthermore, Applicant does not waive any right to take any action that would be appropriate to antedate or

otherwise remove any listed document as a competent reference against the claims of the present application. The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist.

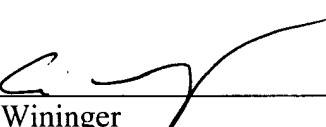
The Examiner is requested to initial the enclosed Form PTO-1449 and return a copy thereof to the undersigned.

If for any reason an insufficient fee has been paid, please charge the insufficiency to Deposit Account No. 05-0150.

Date: 12/28/04

Respectfully submitted,

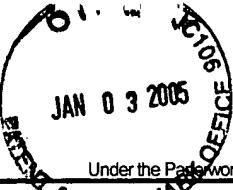
Squire, Sanders & Dempsey LLP  
600 Hansen Way  
Palo Alto, CA 94304-1043  
Tel: (650) 856-6500  
Fax: (650) 843-8777

By   
Aaron Wininger  
Attorney for Applicant(s)  
Registration No.: 45,229

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

Date: Dec. 28, 2004 By: Cathi L.G. Thoorsell  
Cathi L.G. Thoorsell



JAN 03 2005

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for Form 149A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

Shee

1 of 2

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First Named Inventor	Heng-Chia CHANG
Art Unit	3662
Examiner Name	Not yet assigned.
Attorney Docket Number	62348.00003

## **U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US- 4, 813,057	03-14-1989	Larry W. FULLERTON	
	2	US- 4,641,317	02-03-1987	Larry W. FULLERTON	
	3	US- 4,979,186	12-18-1990	Larry W. FULLERTON	
	4	US-5,363,108	11-08-1994	Larry W. FULLERTON	

## **FOREIGN PATENT DOCUMENTS**

Examiner Signature		Date Considered	
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<sup>4</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>5</sup> Applicant's unique citation designation number (optional).<sup>6</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>7</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>8</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>9</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>10</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				<i>Application Number</i>	10/709,498
				<i>Filing Date</i>	May 10, 2004
				<i>First Named Inventor</i>	Heng-Chia CHANG
				<i>Art Unit</i>	3662
				<i>Examiner Name</i>	Not yet assigned.
<i>(Use as many sheets as necessary)</i>				<i>Attorney Docket Number</i>	62348.00003
Sheet	2	of	2		

Examiner Signature		Date Considered	
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**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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